Agrawal, Dharma P. and Mahgoub, I. O.
Analysis of a Class of Cluster-Based Multiprocessor Systems, 85 (43)
Al-Hallaq, A. Y. and Lakshmivarahan, S.
Self-Routing Control Algorithms and the Passability of Random Inputs by the Base-Line Network, 139 (43)
Andresen, Bjarne
See Flick, David J.

Bhattacharya, Prabir and Mukherjee, N. P.
Fuzzy Groups: Some Group Theoretic Analogs II, 77 (41)
Bhuyan, Laxmi N.
See Das, Chita, R.
Boekee, D. E.
See Van Der Lubbe, J. C. A.
Boxma, Y.
See Van Der Lubbe, J. C. A.
Brown, Cynthia A.
See Purdom, Jr., Paul Walton

Calabrese, Philip
An Algebraic Synthesis of the Foundations of Logic and Probability, 187 (42)
Chakrabarti, P. P.
See Das, P. P.
Chatterji, B. N.
See Das, P. P.
Chaudhuri, Pranay
Algorithms for Some Graph Problems on a Distributed Computational Model, 205 (43)
Chen, Wen-Tsuen and Liu, Lung-Lung
A Parallel Approach for Theorem Proving in Propositional Logic, 61 (41)

Das, Chita, R. and Bhuyan, Laxmi N.
Dependability Evaluation of Interconnection Networks, 107 (43)
Das, P. P., Chakrabarti, P. P., and Chatterji, B. N.
Distance Functions in Digital Geometry, 113 (42)
Das, P. P., Chakrabarti, P. P., and Chatterji, B. N.
Generalized Distances in Digital Geometry, 51 (42)

Ehlers, E. M. and Von Solms, S. H.
A Hierarchy of Random-Context Grammars and Automata, 1 (42)
Er, M. C.
A General Algorithm for Finding a Shortest Path Between Two *n*-Configurations, 137 (42)
Er, M. C.
A Loopless and Optimal Algorithm for the Cyclic Towers of Hanoi Problem, 283 (42)

Fan, Tzu-I
Optimal Matching of Deformed Patterns with Positional Influence, 259 (41)
Flick, David J., Salamon, Peter, and Andresen, Bjarne
Metric Bounds on Losses in Adaptive Coding, 239 (42)
Fry, James P.
See Yang, Dongqing

Goel, S. N.
See Singh, R. P.
Guiasu, Silviu
An Entropic Approach to the Optimum Search for the Optimum of a Unimodal Function, 69 (42)
Güting, Ralf Hartmut and Schilling, Werner
A Practical Divide-and-Conquer Algorithm for the Rectangle Intersection Problem, 95 (42)

Jurgensen, Helmut and Simovici, Dan A.
Towards an Abstract Theory of Dependency Constraints in Relational Databases, 43 (41)

Kant, K.
Software Fault Tolerance in Real-Time Systems, 255 (42)

Krithivasan, Kamala and Sitalakshmi, R.
Efficient Two-Dimensional Pattern Matching in the Presence of Errors, 169 (43)

Lakshmivarahan, S.
Editorial, 1 (43)
See Al-Hallaq, A. Y.
Liu, Lung-Lung
See Chen, Wen-Tsuen
Lucanu, Dorel
Several Properties of Array Languages, 185 (43)

Mahgoub, I. O.
See Agrawal, Dharma P.
Marinescu, Dan C. and Rice, John R.
Domain Oriented Analysis of PDE Splitting Algorithms, 3 (43)
Mingsheng, Ying
Fuzzy Semilattices, 155 (43)
Mukherjee, N. P.
See Bhattacharya, Prabir

Nissan, Ephraim
Data Analysis Using a Geometrical Representation of Predicate Calculus, 187 (41)

O'Neill, William D.
An Application of Shannon's Coding Theorem to Information Transmission in Economic Markets, 171 (41)
Ottmann, Thomas, Soisalon-Soininen, Eljas, and Wood, Derick
Partitioning and Separating Sets of Orthogonal Polygons, 31 (42)

Parthasarathy, K.
See Sridhar, M. K.
Purdom, Jr., Paul Walton and Brown, Cynthia A.
Polynomial-Average-Time Satisfiability Problems, 23 (41)

Rice, John R.
See Marinescu, Dan C.

Salamon, Peter
See Flick, David J.
Sastry, P. S.
See Thathachar, M. A. L.
Schilling, Werner
See Güting, Ralf Hartmut
Sen, A.
See Sengupta, A.
Sengupta, A. and Sen, A.
On the Diagnosability Problem for a General Model of Diagnosable Systems, 83 (42)
Shankar, Priti
See Srikant, Y. N.
Simovici, Dan A.
See Jurgensen, Helmut
Singh, R. P. and Goel, S. N.
Additive Information Measures with Preference of Order β, 161 (43)
Sitalakshmi, R.
See Krithivasan, Kamala
Soisalon-Soininen, Eljas
See Ottmann, Thomas
Sridhar, M. K., Srinath, R., and Parthasarathy, K.
On the Direct Parallel Solution of Systems of Linear Equations: New Algorithms and Systolic Structures, 25 (43)
Srikant, Y. N. and Shankar, Priti
Parallel Parsing of Programming Languages, 55 (43)
Srinath, R.
See Sridhar, M. K.

Teorey, Toby J.
See Yang, Dongqing
Thathachar, M. A. L. and Sastry, P. S.
A Hierarchical System of Learning Automata That Can Learn the Globally Optimal Path, 143 (42)

Van Der Lubbe, J. C. A., Boekee, D. E., and Boxma, Y.
Bivariate Certainty and Information Measures, 139 (41)
Von Solms, S. H.
See Ehlers, E. M.

Wood, Derick
See Ottmann, Thomas

Yager, Ronald R.
On the Dempster-Shafer Framework and New Combination Rules, 93 (41)

Yager, Ronald R.
Set-Based Representations of Conjunctive and Disjunctive Knowledge, 1 (41)

Yang, Dongqing, Teorey, Toby J., and Fry, James P.
A Practical Approach to Transforming Extended ER Diagrams into the Relational Model, 167 (42)

A General Algorithm for Finding A Shortest Path Between Two n-Configurations
(Er), 137 (42/2)
A Hierarchical System of Learning Automata That Can Learn the Globally Optimal Path
(Thathachar), 143 (42/2)
A Hierarchy of Random-Context Grammars and Automata
(Ehlers), 1, (42/1)
A Loopless and Optimal Algorithm for the Cyclic Towers of Hanoi Problem
(Er), 283 (42/3)
A Parallel Approach for Theorem Proving in Propositional Logic
(Chen), 61 (41/1)
A Practical Approach to Transforming Extended ER Diagrams into the Relational Model
(Yang), 167 (42/2)
A Practical Divide-and-Conquer Algorithm for the Rectangle Intersection Problem
(Güting), 95 (42/2)
Additive Information Measures with Preference of Order β
(Singh), 161 (43/3)
Algorithms for Some Graph Problems on a Distributed Computational Model
(Chaudhuri), 205 (43/3)
An Algebraic Synthesis of the Foundations of Logic and Probability
(Calabrese), 187 (42/3)
An Application of Shannon's Coding Theorem to Information Transmission in Economic Markets
(O'Neill), 171 (41/2)
An Entropic Approach to the Optimum Search for the Optimum of a Unimodal Function
(Guiasu), 69 (42/1)
Analysis of a Class of Cluster-Based Multiprocessor Systems
(Agrawal), 85 (43/1-2)

Bivariate Certainty and Information Measures
(Van Der Lubbe), 139 (41/2)

Data Analysis Using a Geometrical Representation of Predicate Calculus
(Nissan), 187 (41/3)
Dependability Evaluation of Interconnection Networks
(Das), 107 (43/1-2)
Distance Functions in Digital Geometry
(Das), 113 (42/2)
Domain Oriented Analysis of PDE Splitting Algorithms
(Marinescu), 3 (43/1-2)
Editorial
(Lakshmivarahan), 1 (43/1-2)
Efficient Two-Dimensional Pattern Matching in the Presence of Errors
(Krithivasan), 169 (43/3)

Fuzzy Groups: Some Group Theoretic Analogs II
(Bhattacharya), 77 (41/1)
Fuzzy Semilattices
(Mingsheng), 155 (43/3)

Generalized Distances in Digital Geometry
(Das), 51 (42/1)

Metric Bounds on Losses in Adaptive Coding
(Flick), 239 (42/3)

On the Dempster-Shafer Framework and New Combination Rules
(Yager), 93 (41/2)
On the Diagnosability Problem for a General Model of Diagnosable Systems
(Sengupta), 83 (42/1)
On the Direct Parallel Solution of Systems of Linear Equations: New Algorithms and Systolic Structures
(Sridhar), 25 (43/1-2)
Optimal Matching of Deformed Patterns with Positional Influence
(Fan), 259 (41/3)

Parallel Parsing of Programming Languages
(Srikant), 55 (43/1-2)
Partitioning and Separating Sets of Orthogonal Polygons
(Ottmann), 31 (42/1)
Polynomial-Average-Time Satisfiability Problems
(Purdom Jr.), 23 (41/1)

Self-Routing Control Algorithms and the Passability of Random Inputs by the Base-Line Network
(Al-Hallaq), 139 (43/1-2)
Set-Based Representations of Conjunctive and Disjunctive Knowledge
(Yager), 1 (41/1)
Several Properties of Array Languages
(Lucanu), 185 (43/3)
Software Fault Tolerance in Real-Time Systems
(Kant), 255 (42/3)
Towards an Abstract Theory of Dependency Constraints in Relational Databases
(Jurgensen), 43 (41/1)

INFORMATION SCIENCES

An International Journal

Volume 41
Number 1
1987

RONALD R. YAGER (New Rochelle, New York)
Set-Based Representations of Conjunctive and Disjunctive Knowledge 1

PAUL WALTON PURDOM, JR. (Bloomington, Indiana) AND CYNTHIA A. BROWN (Boston, Massachusetts)
Polynomial-Average-Time Satisfiability Problems 23

HELMUT JURGENSEN (London, Ontario) AND DAN A. SIMOVICI (Boston, Massachusetts)
Towards an Abstract Theory of Dependency Constraints in Relational Databases 43

WEN-TSUEN CHEN AND LUNG-LUNG LIU (Taiwan, Republic of China)
A Parallel Approach for Theorem Proving in Propositional Logic 61

PRABIR BHATTACHARYA (Safat, Kuwait) AND N. P. MUKHERJEE (New Delhi, India)
Fuzzy Groups: Some Group Theoretic Analogs II 77

NORTH-HOLLAND

INFORMATION SCIENCES

An International Journal

Volume 41
Number 2
1987

RONALD R. YAGER (New Rochelle, New York)
On the Dempster-Shafer Framework and New Combination Rules 93

J. C. A. VAN DER LUBBE, D. E. BOEKEE, AND Y. BOXMA (Delft, The Netherlands)
Bivariate Certainty and Information Measures 139

WILLIAM D. O'NEILL (Chicago, Illinois)
An Application of Shannon's Coding Theorem to Information Transmission in Economic Markets 171

NORTH-HOLLAND

INFORMATION SCIENCES

An International Journal

Volume 41
Number 3
1987

EPHRAIM NISSAN (Beer-Sheva, Israel)
Data Analysis Using a Geometrical Representation of Predicate Calculus 187

TZU-I FAN (Taiwan, Republic of China)
Optimal Matching of Deformed Patterns with Positional Influence 259

NORTH-HOLLAND

INFORMATION SCIENCES

An International Journal

Volume 42
Number 1
1987

E. M. EEHLERS AND S. H. VON SOLMS
(Johannesburg, Republic of South Africa)
A Hierarchy of Random-Context Grammars and Automata 1

THOMAS OTTMANN (Karlsruhe, West Germany),
ELJAS SOISALON-SOININEN, AND
DERICK WOOD (Waterloo, Ontario, Canada)
Partitioning and Separating Sets of Orthogonal Polygons 31

P. P. DAS, P. P. CHAKRABARTI, AND B. N. CHATTERJI
(Kharagpur, India)
Generalized Distances in Digital Geometry 51

SILVIU GUIASU (Toronto, Ontario, Canada)
An Entropic Approach to the Optimum Search for the Optimum
of a Unimodal Function 69

A. SENGUPTA (Columbia, South Carolina)
AND A. SEN (Tempe, Arizona)
On the Diagnosability Problem for a General Model
of Diagnosable Systems 83

NORTH-HOLLAND

INFORMATION SCIENCES

An International Journal

Volume 42
Number 2
1987

RALF HARTMUT GÜTING AND WERNER SCHILLING (Dortmund, West Germany)
A Practical Divide-and-Conquer Algorithm for the Rectangle Intersection Problem 95

P. P. DAS, P. P. CHAKRABARTI, AND B. N. CHATTERJI (Kharagpur, India)
Distance Functions in Digital Geometry 113

M. C. ER (Nedlands, Australia)
A General Algorithm for Finding a Shortest Path Between Two *n*-Configurations 137

M. A. L. THATHACHAR AND P. S. SASTRY (Bangalore, India)
A Hierarchical System of Learning Automata That Can Learn the Globally Optimal Path 143

DONGQING YANG (Beijing, Republic of China), TOBY J. TEOREY, AND JAMES P. FRY (Ann Arbor, Michigan)
A Practical Approach to Transforming Extended ER Diagrams into the Relational Model 167

NORTH-HOLLAND

INFORMATION SCIENCES

An International Journal

Volume 42
Number 3
1987

PHILIP CALABRESE (San Diego, California)
An Algebraic Synthesis of the Foundations of Logic and Probability . . . 187

J. DAVID FLICK, PETER SALAMON, AND BJARNE ANDRESEN (San Diego, California)
Metric Bounds on Losses in Adaptive Coding 239

K. KANT (University Park, Pennsylvania)
Software Fault Tolerance in Real-Time Systems 255

M. C. ER (Nedlands, Western Australia)
A Loopless and Optimal Algorithm for the Cyclic Towers of Hanoi Problem 283

NORTH-HOLLAND

INFORMATION SCIENCES

An International Journal

Volume 43
Numbers 1–2
1987

SPECIAL ISSUE: PARALLEL PROCESSING/PART I

S. LAKSHMIVARAHAN (Norman, Oklahoma)
Editorial 1

DAN C. MARINESCU AND JOHN R. RICE (West Lafayette, Indiana)
Domain Oriented Analysis of PDE Splitting Algorithms 3

M. K. SRIDHAR, R. SRINATH AND K. PARTHASARATHY (Bangalore, India)
On the Direct Parallel Solution of Systems of Linear Equations: New Algorithms and Systolic Structures 25

Y. N. SRIKANT AND PRITI SHANKAR (Bangalore, India)
Parallel Parsing of Programming Languages 55

DHARMA P. AGRAWAL AND I. O. MAHGOUB (Raleigh, North Carolina)
Analysis of a Class of Cluster-Based Multiprocessor Systems 85

CHITA R. DAS (University Park, Pennsylvania) AND LAXMI N. BHUYAN (Lafayette, Louisiana)
Dependability Evaluation of Interconnection Networks 107

A. Y. AL-HALLAQ AND S. LAKSHMIVARAHAN (Norman, Oklahoma)
Self-Routing Control Algorithms and the Passability of Random Inputs by the Base-Line Network 139

NORTH-HOLLAND

INFORMATION SCIENCES

An International Journal

Volume 43
Number 3
1987

YING MINGSHENG (Jiangxi, China)
Fuzzy Semilattices 155

R. P. SINGH (Ghaziabad, India) AND S. N. GOEL (Meerut, India)
Additive Information Measures with Preference of Order β 161

KAMALA KRITHIVASAN (College Park, Maryland) AND
R. SITALAKSHMI (Madras, India)
Efficient Two-Dimensional Pattern Matching
in the Presence of Errors 169

DOREL LUCANU (Iasi, Romania)
Several Properties of Array Languages 185

PRANAY CHAUDHURI (Kharagpur, India)
Algorithms for Some Graph Problems on a Distributed
Computational Model 205

AUTHOR INDEX 229

TITLE INDEX 233

NORTH-HOLLAND